



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | BISMARCK, ND | Accident Number: | CHI93LA128 |
| Date & Time: | 03/10/1993, 2222 CST | Registration: | N88384 |
| Aircraft: | BELLANCA 7GCBC | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

THE PILOT DEPARTED GRAND ISLAND WITH FULL FUEL AND CALCULATIONS INDICATED AN EN ROUTE FUEL STOP WOULD BE REQUIRED. WHILE EN ROUTE, THE PILOT RECALCULATED THE FUEL CONSUMPTION AND ELECTED NOT TO MAKE THE FUEL STOP BUT TO CONTINUE TO THE DESTINATION. FUEL EXHAUSTION OCCURRED DURING THE LANDING APPROACH AT THE DESTINATION AIRPORT. A FORCED LANDING WAS MADE ON A ROAD DURING WHICH THE RIGHT WING CONTACTED A TREE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO REFUEL THE AIRPLANE EN ROUTE TO ENSURE ADEQUATE FUEL TO COMPLETE THE FLIGHT.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH

Findings

1. FLUID,FUEL - EXHAUSTION
 2. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
 3. (F) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
 4. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Findings

5. (F) LIGHT CONDITION - BRIGHT NIGHT
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Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

6. (F) OBJECT - TREE(S)

Factual Information

Pilot Information

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|----------------------------------|--|-------------------------------|------------|
| Certificate: | Commercial | Age: | 45, Male |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Unknown |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical--w/ waivers/lim. | Last FAA Medical Exam: | 02/04/1993 |
| Occupational Pilot: | Last Flight Review or Equivalent: | | |
| Flight Time: | 1000 hours (Total, all aircraft), 251 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--|---------------------------------------|-----------------|
| Aircraft Make: | BELLANCA | Registration: | N88384 |
| Model/Series: | 7GCBC 7GCBC | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 774-75 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | 01/02/2000, 100 Hour | Certified Max Gross Wt.: | 1650 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | O-320 |
| Registered Owner: | LEROY E. NIELSEN | Rated Power: | 150 hp |
| Operator: | LEROY E. NIELSEN | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|----------------------------------|------------------------|---|------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Night/Bright |
| Observation Facility, Elevation: | BIS, 1677 ft msl | Distance from Accident Site: | 3 Nautical Miles |
| Observation Time: | 2150 CST | Direction from Accident Site: | 310° |
| Lowest Cloud Condition: | Clear / 0 ft agl | Visibility | 12 Miles |
| Lowest Ceiling: | None / 0 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 5 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 90° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | -8° C / -9° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | GRAND ISLAND, NE (GRI) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 1820 CST | Type of Airspace: | Class D |

Airport Information

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|----------------------|--------------------------|---------------------------|----------------|
| Airport: | BISMARCK MUNICIPAL (BIS) | Runway Surface Type: | N/A |
| Airport Elevation: | 1677 ft | Runway Surface Condition: | |
| Runway Used: | 31 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced Landing |

Wreckage and Impact Information

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|---------------------|--------|----------------------|-------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | |

Administrative Information

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|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | PAMELA S SULLIVAN | Report Date: | 11/03/1993 |
| Additional Participating Persons: | ROBERT HARRIS; FARGO, ND | | |
| Publish Date: | | | |
| Investigation Docket: | NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ . | | |

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).